Integrated Delivery Schedule Update

WRAC Meeting – September 3, 2015

Tom Teets – Division Director Office of Everglades Policy & Coordination

Overview

- Integrated Delivery Schedule (IDS)
 - Purpose
 - Background & Process
 - Public Workshops
 - Results of Analysis
 - Theme 5
 - Next Steps



Purpose

 To develop a realistic schedule and sequencing plan for achieving restoration benefits as soon as possible consistent with state and federal authorizations and funding



Background and Process

- Background
 - The IDS is required as part of the CERP Programmatic Regulations
 - Regular updates to the IDS are required
 - The process is done in consultation with the South Florida Ecosystem Restoration Task Force
- Process
 - Workshops sponsored by South Florida Ecosystem Restoration Task Force Working Group
 - Engage stakeholders in developing the IDS



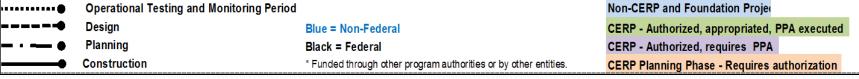
IDS Public Workshops





Draft IDS Worksheet

	Fiscal Year																
Project Control Cont	Yellow Book Code	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Federal Construction Cost			105	102	70	59	4	1	20	10	6	0	0	0	0	0	0
Non-Federal Construction Cost			66	90	45	2	2	1	1	1	1	0	0	0	0	0	0
Total Construction Cost			171	192	115	61	6	2	21	11	7	0	0	0	0	0	0
Modified Water Deliveries to Everglades National Park*																	
Herbert Hoover Dike*									-								
Seminole Big Cypress*	OPE																
Restoration Strategies*												•					
Tamiami Trail Next Steps Phase 1*			-•-		•												
Kissimmee River Restoration						-											
West Palm Beach Canal/STA-1E			$\overline{}$														
C-111 South Dade			—			-											
Picayune Strand Restoration	OPE																
Merritt Pump Station		••••••)														
Faka Union Pump Station		_															
Manatee Mitigation and Flood Protection Features		-	-		•												
Miller Pump Station				•••	•••												
Remaining Features - Road removal and canal backfill				•	-												
Site 1 Impoundment - Phase 1	M_P1	•															
Indian River Lagoon-South																	
C-44 Intake Canal	В	••••															
C-44 Reservoir	В					-	,										
C-44 STA & Pump Station	В	•															
Decomp Physical Model	QQ_P1)													
Caloosahatchee River (C-43) West Basin Storage Reservoir - Phase 1	D_P1	•	•			•											
Broward County Water Preserve Areas: C-11 Impoundment	Q																
Loxahatchee River Watershed Restoration Project	X, Y, K, GGG, OPE		_		•												
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Public Sequencing Plan Examples

Integrated Delivery Schedule Sequencing Plan Summary Sheet

Sequencing Plan Name: Establish a Unique and Descriptive Name of the Proposed Sequencing Plan.

Maximizing Ecological Benefits & Economic Return

Author of the Sequencing Plan: Identify the name of the Al Sequencing Plan during the exercise and identify spokespers

Anticipated Benefits: Identify geographic, ecological, hyd benefits of your sequencing plan.

This plan focuses on projects + the region to deliver widespread from the Northern Estuarics Everglades and Bis cayne Natio

Priorities for Concurrent Progress

Sequencing Plan: Identify projects in your recommended ord what projects show go below the black line on the Draft IDS V

Planning & Design

- · EAA Reservoir Phase 112
- · BBCW Phase 1 12 (including le
- · CIII spreader remainder of west
- · Remainder of IRL South

construction

- · Broward WPA
- · C43 (portion not funded
- · CEPP (once authorized)

Integrated Delivery Schedu Sequencing Plan Summary S

Sequencing Plan Name:

"Not Just Our Pet Pig": Northern Estuaries Protection and E Benefits Sequencing Plan

Author of the Sequencing Plan: Identify the name of the A Sequencing Plan during the exercise and identify spokespers

Anticipated Benefits: Identify geographic, ecological, hydronical benefits of your sequencing plan.

Geographic: reaching an overarching goal for Everglades res sustainable wading bird population, provide water supply for a supply for the Lake O service area users, and ability to send the ENP.

The following is an excerpt from the IRL-S PIR which supports geographic benefits of our sequencing plan. Although through write up we have relied heavily on our familiarity with the IRLshould be noted that this type of information is available for al listed in our sequencing plan.

"Further, scientists have identified the large spatial extent of s one of the defining physical characteristics of the pre-drainage the south Florida wetlands, in combination with the complex r multiple populations of plants and animals to thrive and persis the pre-drainage area in south Florida made it possible for the support genetically viable numbers and sub-populations of sp ranges and/or narrow habitat requirements; • provide the aqua large numbers of higher vertebrate animals in a naturally nutri sustain habitat diversity despite natural disturbances. The al to recover from disturbances decreases as the available habit habitat diversity, the amount of seasonal refugia, and the nur

Integrated Delivery Schedule Sequencing Plan Summary Sheet

Sequencing Plan Name: Establish a Unique and Descriptive Name of the Proposed Sequencing Plan. Central Floris

Author of the Sequencing Plan: Identify the name of the Author(s) that developed the Sequencing Plan during the exercise and identify spokesperson if applicable.

Anticipated Benefits: Identify geographic, ecological, hydrological, and/or economic benefits of your sequencing plan.

Focus on ingelementing CEPP as quickly as provide · Additional storage to relieve N. Estrarises + borne fit Central Even + 5 outhorn Estongias + Sain Fleishilly to adapt to climate change · Control segges E of wets EUP+ Wets & to enable higher stages in the Every lader · Contrain Progress on BBCW, CIII Spreader, Decomp

Sequencing Plan: Identify projects in your recommended order of sequencing, (i.e. what projects show go below the black line on the Draft IDS Worksheet)

- 1. CEPP: @ South & North New Worker
- 2. Storage : CHH Senetito per such reach (Interim LOKS charse)

 3. (E) De Rudnick only : FAA Storage

 4. Seaporge Mgnt : EENP Sayage management

 5. To maximize each benefits : (a) Complete BOCU Ch. I

 (b) Complete BOCU Ch. I

 (c) Affer (EPP, complete remain Jecomp

 (c) PIRS: for (1115C Eastern

 (c) Page 1073

Addendin from D Rudnick : In timbe 1-28 interceptor project of address out wit - 24 with and with

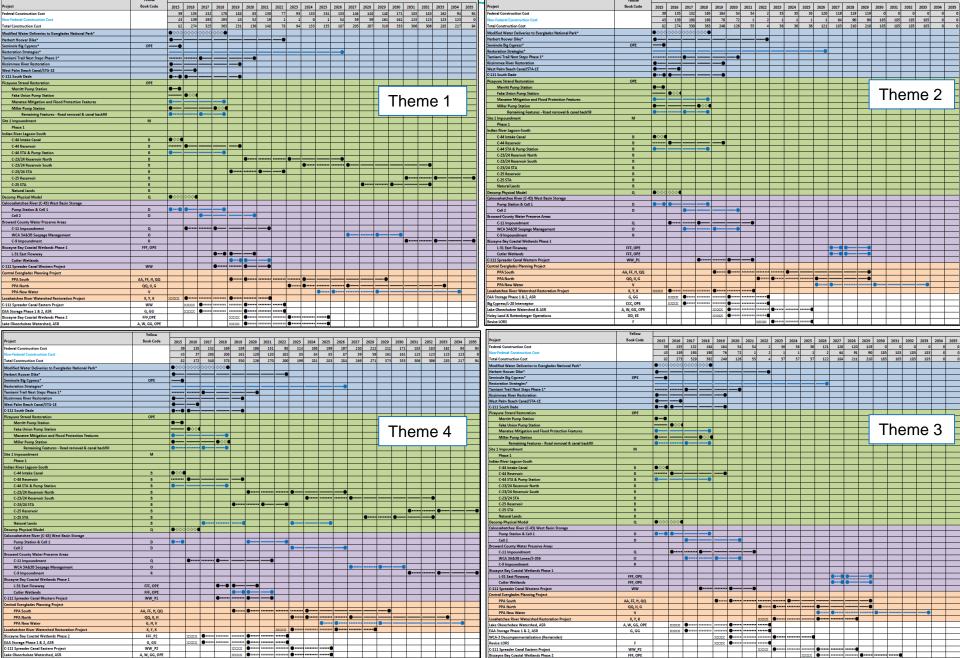
also decrease (USACE, 1999). In south Florida roughly 50 percent of the pre-drainage



Stakeholder Themes 1-4

Project Federal Construction Cost

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035



Theme 5

	Yellow																										
Project	Book Code	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035					
Federal Construction Cost (SFER)		41	138	142					191		221		186	200	144	151		0	0	0	0	0					
Non-Federal Construction Cost (SFER)		43	139	161	162	111	119	56	125	142	141	210	210	192	192	123	123	0	0	0	0	0					
Total Construction Cost (SFER)		84	277	303	352	314	260	269	316	338	362	423	396	392	336	275	223	0	0	0	0	0					
Modified Water Deliveries to Everglades National Park*		●◇◇◇	0000	0000	0000																						
Herbert Hoover Dike*		•—																									
Seminole Big Cypress*	OPE																										
Restoration Strategies*																											
Tamiami Trail Next Steps Phase 1*		•••••		•			-																				
Kissimmee River Restoration		•—												xxxx SMART Planning Compliance Approval													
West Palm Beach Canal/STA-1E		•—																									
C-111 South Dade Contract 8 & 9		•		_										Planning													
C-111 South Dade PACR			• < < <	000000	00000000	00000000	•	•••••						Design, PPA Execution, Real Estate Acquisition													
Picayune Strand Restoration	OPE													Construction													
Merritt Pump Station		•-•												0000 • Operational Testing and Monitoring Period													
Faka Union Pump Station															Foundation Projects												
Manatee Mitigation and Flood Protection Features		-			-																						
Miller Pump Station		•—			0000									Generation 1 Projects													
Remaining Features - Road removal & canal backfill				•—	-									Generation 2 Projects													
Site 1 Impoundment	M													Pla	nning P	Phase - N	Not Auth	norized									
Phase 1														Blu	ie = Noi	n-Feder	al										
Indian River Lagoon-South														Bla	ck = Fe	deral											
C-44 Intake Canal	В	0000												* F	unded t	through	other n	rogram	authori	ties or k	v other	entities					
C-44 Reservoir	В		•												ariaca (l	. canor p	. Jgrain			, 00,,01	2.16.603					
C-44 STA & Pump Station	В	•—			-																						
C-23/24 Reservoir North	В				•			•—																			
C-23/24 Reservoir South	В					•			•																		
C-23/24 STA	В												•	•••••	•—												
C-25 Reservoir	В							•		-	_		_														
C-25 STA	В								•		•			•													
Natural Lands	В																										
Decomp Physical Model	Q	●◇◇◇	000																								
Caloosahatchee River (C-43) West Basin Storage																											
Pump Station & Cell 1	D	00	•—		-																						

Restoration Strategies*																				
Tamiami Trail Next Steps Phase 1*		•••••	•••••	•—																
Kissimmee River Restoration		•—				-					N.	xxx SM	1ART Pla	nning (omplia	nce Anr	roval		$\overline{}$	
West Palm Beach Canal/STA-1E		•—										□□□● Pla			ompila	ice App	1014			
C-111 South Dade Contract 8 & 9		••	•																	
C-111 South Dade PACR			●◇◇◇	000000	00000000	00000000	•	•••••				Design, PPA Execution, Real Estate Acquisition								
Picayune Strand Restoration	OPE										_	• Co	onstruct	tion						
Merritt Pump Station		● -●									□ •	000 • O	peration	nal Testi	ing and	Monito	ring Per	iod		
Faka Union Pump Station											Fo	oundatio	n Projec	cts						
Manatee Mitigation and Flood Protection Features		•—			-							eneratio								
Miller Pump Station		•—			-000								,							
Remaining Features - Road removal & canal backfill		••••••		•—	-						G	eneratio	n 2 Proj	ects						
Site 1 Impoundment	M										PI	lanning P	hase - N	Not Auth	norized					
Phase 1											Bl	lue = Nor	n-Feder	al						
Indian River Lagoon-South											□ RI	lack = Fe	deral							

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Cell 2

C-9 Impoundment

L-31 East Flowway

Increase S-356 (CNT 4) L-29 Gated Spillway (CNT 4b)

Increase S-333 (CNT 4a)

PPA North

PPA New Water

L-67A Structures 2 & 3 (CNT 5)

Lake Okeechobee Watershed, ASR

EAA Storage & ASR/Decomp Ph2

Cutler Wetlands

Broward County Water Preserve Areas C-11 Impoundment

WCA 3A&38 Seepage Management

Biscayne Bay Coastal Wetlands Phase 1

C-111 Spreader Canal Western Project

PPA South: LRR & PPA Execution

Remove Old Tamiami Trail (CNTX)

L-67A Structure 1 & Gap in L-67C Levee (CNT 3)

Removal L-67C & L-67 Ext, Constr L-67D Levee (CNT 6) Removal L-29 Levee & Backfill L-67 Ext (CNT 7)

Loxahatchee River Watershed Restoration Project

Big Cypress/L-28 Interceptor (Western Everglades)

C-111 Spreader Canal Eastern & BBCW Ph2

Central Everglades Planning Project (Authorization WRDA 2016)

Theme 5 Benefits:

- Maximizes holistic benefits to regional system as early as possible
 - Ensures continued stream of construction which provides for steady increase in regional ecosystem benefits
 - Provides benefits to Caloosahatchee & St Lucie estuaries from storage while infrastructure necessary to open up system for additional flow south is being implemented (CEPP south)
 - Improves conditions and flow through WCA-3 and provides more water to ENP and FL Bay as early as possible
 - Advances projects with greatest potential to avert ongoing degradation and considers the implications of climate change and sea-level rise
 - Increases the spatial extent of wetlands with 55K acres in Picayune Strand, over 4K acres in BCWPA and the expansion of coastal wetlands in BBCW
 - Implements majority public input on priorities i.e. CEPP, BBCW_P1, BCWPA

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Theme 5:

- Ensures additional projects will be ready to continue progress on restoration
 - Includes most of the planning efforts for projects identified by stakeholders as priorities
 - Sequencing of planning efforts considers the need to:
 - Prioritize CERP planning study for Big Cypress/L-28 Interceptor (Western Everglades)
 - Planning on LOW while infrastructure necessary to open up system for additional flow south is being implemented (CEPP South)
 - Remain consistent with State's LO Basin Management Action Plan obligations to initiate studies in 2016
 - Plan for storage south of lake while the necessary Restoration
 Strategies and CEPP North are being implemented
 - Time necessary to assess concerns & uncertainties in south Dade

Theme 5 Benefits:

Consistency with project dependencies and constraints

- Maintains required 50/50 cost share
- Commitment to complete construction on projects where construction has been initiated
- Fulfills obligations to Congress (Authorizations) and State commitment (PPAs) and identifies funding needs to continue progress on restoration
- FY 16 State budget process has committed SFWMD to construction of C-43
- FY 16 Presidents budget includes funding for design of BCWPA C-11 Impoundment and BBCW Phase 1, must execute PPAs before Corps can move into construction on projects authorized in WRRDA 2014
- Consistent with project dependencies for moving water south
 - Modifications to downstream infrastructure
 - BCWPA C-11 Impoundment
 - Restoration Strategies

Feedback Received on Theme 5

- General Thoughts on Theme 5:
 - Shows good synergy of projects
 - Shows steady increase of benefits to the system
- Projects:
 - Consider looking at storage regionally/holistically
 - LOW and Western Everglades planning sequence well received
 - Look at moving components of BBCW forward, specifically Cutler Wetlands
- Funding:
 - Maintain stable funding source for project implementation
 - If additional funding becomes available, move projects forward

Next Steps

- Schedule
 - SFWMD Governing Board September 10, 2015
 - Working Group Meeting September 23, 2015
 - Task Force Meeting November 19, 2015
 - Use IDS to guide our planning, design, and construction sequencing and budgeting

Questions?

http://www.evergladesrestoration.gov/content/ids.html